

REMARKS

The foregoing amendments and these remarks are in response to the Final Office Action dated April 4, 2006. At the time of the Office Action, claims 1-3, 5, 6, 8-12 and 14-20 were pending in the application. Claims 16 to 20 were withdrawn from consideration by the Examiner as being directed to a non-elected invention under 37 C.F.R. §1.142(b). In the Office Action, Claim 1 was objected to for informalities. Claims 1-3, 5, 6, 8-12, 14 and 15 were rejected 35 U.S.C. §103(a). The objections and rejections are discussed in more detail below.

I. Election/Restrictions

The Examiner withdrew claims 16-20 from consideration because it was deemed that these claims were directed to an invention that was independent or distinct from the invention originally claimed, because claim 16 did not include the hub receiving the bearing with a pulley mounted thereon, and because claim 1 did not include the sleeve projecting outward from the end wall for receiving a second bearing. Applicant has added the hub to claim 16, and has removed the sleeve therefrom. Further examination of claims 16-20, and new claim 21, is respectfully requested, as claim 16 is now not directed to a non-elected invention in accordance with the Examiner's statement.

II. Claim Objections

Claim 1 was objected to because of the informalities listed in the Office Action. An appropriate amendment is made herein, and withdrawal of the objections is thus respectfully requested.

III. Rejections on Art

Claims 1, 2, 5, 6, 8 & 9 were rejected 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 2003-047195 to Nakatsuka (hereafter "Nakatsuka") in view of U.S. Patent 3,585,822 to Worst (hereafter "Worst"). Claims 3, 10-12, 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakatsuka in view of Worst, and further in view of U.S. Patent No. 5,878,932 to Stephens et al. Applicant respectfully traverses these rejections.

Applicant notes that the purpose of the present invention is to make a synchronous electric motor that can be arranged for existing washing machines. The claims of the present application recite a synchronous electric motor for washing machines and the like, having a rotary drum and having a central stator fixedly mounted on an axis, a rotor arranged outside the stator and rotatably supported and overhanging on said axis with a bearing interposed, and a pulley rigidly rotatable with the rotor. Notably, the pulley is mounted on a hub provided on an end wall of said rotor, the hub receiving the bearing. Moreover, at least a section of the pulley has a predetermined number of grooves, which are positioned according to the position of grooves of the pulley connected with the rotary drum. In particular, the bearings can be rolling contact bearings, as can be seen from Figures 4-7.

Worst discloses a usual and universal asynchronous electric motor with a rotary internal rotor and a fixed external stator. Moreover, Worst does not disclose, teach or show how the pulley is supported on the motor.

Differently from Worst's patent, Applicant's solution teaches a pulley that is rigidly rotatable with the rotor. The stator is fixed and the rotor, outside of the stator, is rotatably supported on the axis of the stator. Furthermore, the rotor can have an essentially cylindrical cup shape with an end wall provided with a hub receiving at least a rolling contact bearing, so that the latter is interposed between the hub and the axis. The pulley can be mounted on said hub and is rotatably integral therewith.

The solution disclosed in Nakatsuka provides an inexpensive electric motor by reducing the number of components and accessories. Nakatsuka's solution is merely to provide only the essential components in order to reduce costs, differently from the solution of the present invention. Nakatsuka teaches: "the rotor 10 is rotatably supported via a bearing 15 and, as shown in the figure 1, it is a friction bearing stopped by shaft "protrusion" 16. Moreover, Nakatsuka's solution does not teach to provide a rotor with a hub where a pulley is mounted.

On the contrary, the solution of the present invention is accurate and sophisticated. The rotor has a cup shape with a hub receiving at least a bearing, in particular, as it is shown in figures 4-7, a rolling contact bearing. The present solution, using at least one rolling contact bearing, has an extremely reduced noise and the perfect balance of all its components and their strong

interconnections permit to obtain a robust construction (as indicated in description page 9 lines 25-27).

Furthermore, in the motor recited in the present claims, it is possible to drive the pulley of different drums by suitably selecting the location of the grooves in the motor pulley. It should be noted that drums of different washing machine producers display different designs of drums and drum pulleys, and therefore normally require dedicated motors. According to the present invention, the location of the grooves in the motor pulley can be varied so as to match the grooves of different drum pulleys, as it can clearly be seen from Figures 6, 7 and 8. In such a way, a kind of universal motor is made available and this finds no precedents in the known art, in particular in the art reflected by Nakatsuka, even when modified on the basis of the teachings of Worst.

For the foregoing reasons, claims 1, 10 and 16 are believed to relate to patentable subject matter, and to be in condition for allowance. The dependent claims are also believed allowable because of their dependence upon allowable base claims, and because of the further features recited.

IV. Conclusion

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

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Respectfully submitted,



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